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11/18/2003

Dwayne Need

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45809

7590

07/02/2007

SHOOK, HARDY & BACON L.L.P.

(c/o MICROSOFT CORPORATION)

INTELLECTUAL PROPERTY DEPARTMENT

2555 GRAND BOULEVARD

KANSAS CITY, MO 64108-2613

EXAMINER

PATEL, MANGLES M

ART UNIT

PAPER NUMBER

2178

MAIL DATE

DELIVERY MODE

07/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/715,782

Applicant(s)

NEED ET AL.

Examiner

Manglesh M. Patel

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This **FINAL** action is responsive to the Amendment filed on 4/16/2007.
2. Claims 1-32 are pending. Claims 1, 13, 25 and 30 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-32 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Deleeuw (U.S. 5,828,900, filed Jan 3, 1996).

Regarding Independent claims 1 and 25, Deleeuw discloses a computerized method for processing a user input event having code associated therewith, said method comprising: Receiving notification of said input event, said notification including the associated code (column 1, lines 50-67, wherein the host input stream handles the notification of the input event which includes the code that is stored in a storage module); Determining whether a text converting component is interested in performing a conversion action with respect to said input event (column 2, lines 1-22, wherein the host multiple-byte character generator or IME with the set language my try to convert the input that may have been already translated by the guest character generator or application. Further Deleeuw indicates that a system is needed for application sharing that will disable the application from receiving the events, therefore it has to determine weather the text converting component is interested in performing a conversion in order to block the received events); Notifying an application of said input event by providing said application a sentinel value when the text converting component is interested in performing said conversion action with respect to said input event (column 2, lines 1-22, wherein Deleeuw indicates that a system is needed to disable the host application from receiving the events to avoid the generation of unpredictable and erroneous characters in an application). Although Deleeuw doesn't explicitly describe sending a sentinel value to the application, he does describe that the event needs to be blocked from the application. At the time of the invention it would have been obvious to one of ordinary skill in the art to send a sentinel value to the application. The motivation for doing so would have been to prevent the application

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from trying to read the event by sending a dummy value thereby preventing the display of unpredictable and erroneous characters.

Regarding Dependent claim 2, which depends on claim 1, Deleeuw discloses wherein said user input event is communicated via a keyboard, a screen with user input capability, a mouse, and/or a device with voice input capacity (column 2, lines 55-67, wherein the input event includes keyboard a display and a mouse device).

Regarding Dependent claims 3, 15 and 26, Deleeuw discloses wherein said code identifies at least a portion of a letter, a character, an ideograph or a symbol associated with said user input event (column 1, lines 25-39, wherein the multiple byte character generator that handles input events includes characters as part of the code).

Regarding Dependent claim 4, which depends on claim 1, Deleeuw discloses communicating said code to the application when the text converting component is not interested in processing said user input event (column 2, lines 1-22, wherein when the multiple-byte character generator is not interested in performing a conversion then the guest application handles the input event).

Regarding Dependent claims 5 and 18, Deleeuw discloses wherein the text converting component is configured to convert said code to a standard for coding text (column 1, lines 25-40). Deleeuw indicates that the text converting component or multiple-byte character generator supports Chinese and Japanese characters but fails to explicitly describe support for a standard. However at the time of the invention it would have been obvious to include support for a coding standard within the text converting component. The motivation for doing so would have been to allow the IME to handle multiple languages using only one character set thereby reducing the complexity of programming.

Regarding Dependent claims 6 and 19, Deleeuw discloses wherein said standard is Unicode (column 1, lines 25-40). Deleeuw indicates that the text converting component or multiple-byte character generator supports Chinese and Japanese characters but fails to explicitly describe support for Unicode encoding. However at the time of the invention it would have been obvious to include support for a coding standard within the text converting component. The motivation for doing so would have been to allow the IME to handle multiple languages using only one character set thereby reducing the complexity of programming.

Regarding Dependent claim 7, which depends from claim 1, Deleeuw discloses revealing said code to the application in response to a request to disclose said code (column 2, lines 1-22, wherein the code is revealed to the guest application based on a request obtained from the input event).

Regarding Dependent claim 8, which depends on claim 1, Deleeuw discloses determining whether a computer component is interested in processing said input event (column 2, lines 1-22, wherein the host multiple-byte character generator or IME with the set language may try to convert the input that may have been already translated by the guest character generator or application. Further Deleeuw indicates that a system is needed for application sharing that will disable the application from receiving the events, therefore it has to determine whether the text converting component is interested in performing a conversion in order to block the received events).

Regarding Dependent claims 9, 24, 28 & 32, Deleeuw discloses obfuscating said code from an application when the computer component is interested in processing input event (column 2, lines 25-33, wherein the code is bypassed from an application when the guest application is interested in processing the input event).

Regarding Dependent claim 10, which depends on claim 9, Deleeuw discloses notifying the application that the computer component is interested in processing said input event (column 2, lines 25-33).

Regarding Dependent claims 11, 23 and 29, Deleeuw discloses wherein said computer component is an input method editor (column 2, lines 1-22).

Regarding Dependent claim 12, which depends on claim 8, Deleeuw discloses wherein said computer component is configured to allow a user to enter at least a portion of a letter, a character, an ideograph or a symbol associated with a desired language (column 2, lines 1-22).

Regarding Independent claim 13, Deleeuw discloses a computer system for processing a user input event having code associated therewith, the system comprising: One or more text converting components (column 2, lines 1-22, wherein the host and guest include text converting components); One or more applications (fig 2, wherein the shared applications reside on the host as shown in numeral 99); An input manager configured to interact with said one or

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more text converting components and said one or more applications, wherein said input manager is configured to receive notification of an input event, said notification including the associated code, and wherein said input manager is further configured to prevent said one or more applications from handling said input event by providing a sentinel value to the one or more applications when said one or more text converting components are interested in performing a conversion with respect to said input event (column 2, lines 1-22, wherein Deleeuw indicates that a system is needed to disable the host application from receiving the events to avoid the generation of unpredictable and erroneous characters in an application). Although Deleeuw doesn't explicitly describe sending a sentinel value to the application, he does describe that the event needs to be blocked from the application. At the time of the invention it would have been obvious to one of ordinary skill in the art to send a sentinel value to the application. The motivation for doing so would have been to prevent the application from trying to read the event by sending a dummy value thereby preventing the display of unpredictable and erroneous characters

Regarding Dependent claim 14, which depends on claim 13, Deleeuw discloses wherein said code is generated by a driver associated with an input device (fig 2, numeral 25, wherein the input includes a keyboard driver to handle the input events).

Regarding Dependent claim 16, which depends on claim 13, Deleeuw discloses wherein said user input event is communicated via an input device that is not configured according to a desired language (column 1, lines 25-40, wherein the multiple-byte character generator handles input devices that are not configured in a desired language by converting the input to the desired language).

Regarding Dependent claim 17, which depends on claim 13, Deleeuw discloses wherein said input manager is further configured to communicate said code to one or more applications when none of the text converters are interested in processing said user input event (column 2, lines 1-23, wherein when none of the text conversion programs are interested in processing the event then the event is passed to the guest applications).

Regarding Dependent claim 20, which depends on claim 13, Deleeuw discloses wherein said input manager is further configured to notify the one or more applications that at least one of said text converting components is interested in performing a conversion action with respect to said input event (column 2, lines 1-23, wherein the guest

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applications are notified that the text converting component is interested in performing a conversion by bypassing the value in the host text converting application and sending it to the guest application).

Regarding Dependent claim 21, which depends on claim 13, Deleeuw discloses wherein said input manager is further configured to reveal said code to one or more of said applications in response to a request to disclose said code (column 2, lines 1-22, wherein the code is revealed to the guest application based on a request obtained from the input event).

Regarding Dependent claim 22, which depends on claim 13, Deleeuw discloses one or more computer components (see fig 12).

Regarding Dependent claim 27, which depends on claim 25, Deleeuw discloses a computer component interface component for determining whether one or more computer components are interested in handling said user input event (column 2, lines 55-67, wherein the interfacing component is shown in fig 2 between the host and guest machines for application sharing).

Regarding Independent claim 30, Deleeuw discloses a computer system for processing a user input event having code associated therewith, the system comprising: Means for receiving notification of a user input event having code associated therewith, said notification including the associated code (column 1, lines 50-67, wherein the host input stream handles the notification of the input event which includes the code that is stored in a storage module); Means for converting said code to a value indicating a character or a symbol (column 1, lines 25-50, wherein the input includes a character code); One or more applications (column 2, lines 1-22, wherein the host and guest contain multiple applications); Means for interacting with said one or more applications and said converting means in response to notification of said user input event, wherein said means for interacting are configured to prevent one or more applications from handling said user input event by providing a sentinel value to the one or more applications when said converting means are interested in performing a conversion action with respect to said input event (column 2, lines 1-22, wherein Deleeuw indicates that a system is needed to disable the host application from receiving the events to avoid the generation of unpredictable and erroneous characters in an application). Although Deleeuw doesn't explicitly describe sending a sentinel value to the application, he does describe that the event needs to be blocked from the application. At the time of the invention it would have been obvious to one of ordinary skill in the art

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to send a sentinel value to the application. The motivation for doing so would have been to prevent the application from trying to read the event by sending a dummy value thereby preventing the display of unpredictable and erroneous characters.

Regarding Dependent claim 31, which depends on claim 30, Deleeuw discloses further comprising means for editing an input method (column 1, lines 10-55, wherein the input method supports editing for selecting different languages and converting to its respective encoding as identified by the multiple-byte character generator).

It is noted that any citation [[s]] to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. [[See, MPEP 2123]]

Response to Arguments

5. Applicant's arguments filed 04/16/07 have been fully considered but are not persuasive.

Applicant Argues: Instead of using a sentinel value, Deleeuw teaches disabling the host application from receiving the input events. In fact, there is no suggestion by Deleeuw to use a sentinel value for any purpose. (pg 9, paragraph 2).

As previously discussed, Deleeuw addresses a similar problem as the present application but does not suggest the particular solution claimed by the Applicants. Mere recognition of a problem, of course, does not render a particular solution obvious. Indeed, the reference is silent with respect to key features of the claimed invention, including notifying an application of an input event or the use of a sentinel value. (pg 9, paragraph 3)

Deleeuw explicitly teaches Away from the suggested modification. Deleeuw expressly requires the disablement of an application to prevent any event handling. Clearly, disabling the application would destroy any utility associated with notifying the application of the input. (pg 10, paragraph 2).

However the Examiner Respectfully disagrees: Simply because the prior art doesn't use the same wording "Sentinel Value" as described in applicants claims does not render it non-obvious. Applicant's claims describe preventing the application from receiving the value of the keystroke if the IME is interested in performing a conversion. The sentinel is described in the specification as follows "In one embodiment of the present invention, such notification is made by the replacing the code value with a sentinel value indicating a pending text event. For example, if an "N" is input and a text converter component is interested in processing the "N", the active applications are made aware only that an input was received and that a conversion event is pending" (see pg 14, paragraph 43), here the functionality of the sentinel value is disclosed. Similarly Deleeuw describes multiple-byte character generators or IME's and states "The host multiple-byte character generator processing of guest keyboard events often corrupts the events and results in the generation of unpredictable and erroneous operating system characters for ultimate use in the shared application". Further he states "A system is needed for application sharing systems in which the host node includes a multiple-byte character generator, which system will disable or otherwise prevent the host multiple-byte character generator from processing guest keyboard events." (see column 2, lines 15-22). Deleeuw suggests that the system prevents the application from processing the keyboard events thereby avoiding unpredictable and erroneous characters to be used by the shared application. Then stating that such processing could be done by either disabling the application or by preventing it from receiving the keyboard events. Similarly applicants invention also prevents the events from being received by the application making them "aware that an input was received and that a conversion is pending". A skilled artisan would easily realize that instead of disabling which is one option suggested by the reference he could also prevent the keyboard events from being interpreted by the application only to make it aware that an input was received and would not process the event.

It is not necessary that the references actually suggest, expressly or in so many words the changes or improvements that applicant has made. The test for combining references is what the references as a whole would have suggested to one of ordinary skill in the art. In re Sheckler, 168 USPQ 716 (CCPA 1971); In re McLaughlin 170 USPQ 209 (CCPA 1971); In re Young 159 USPQ 725 (CCPA 1968).

The equivalent purpose and functionality of the Sentinel value as describe in the specification is suggested by Deleeuv since the secondary option is to otherwise prevent the keyboard input from being processed by the application.

Further more as to the reason to combine not being the same as applicant's.

If it is obvious to combine references for one reason it is obvious to combine references for all reasons.

In re Graf, 145 USPQ 197 (CCPA 1965); In re Finsterwalder 168 USPQ 530 (USPQ 1970); In re Kronig, 539 F.2d 1300, 190 USPQ 425 (CCPA 1976). In re Dillon, 892 F.2d 1544, 13 USPQ 1337 (1989); In re Dillon 919 F.2d 688, 16 USPQ 1897 Fed. Cir. 1990) (in bane).

Furthermore there is a significant advantage in preventing such keyboard input from being processed. One motivation is to prevent the application from handling erroneous operating system characters for ultimate use in the shared application thereby preventing errors in the applications that handle input events.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manglesh M. Patel whose telephone number is (571) 272-5937. The examiner can normally be reached on M, W 6 am-3 pm T, TH 6 am-2pm, Fr 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manglesh M. Patel
Patent Examiner
June 20, 2007

A handwritten signature in black ink, appearing to read 'Manglesh Patel', with a long horizontal flourish extending to the right.A handwritten signature in black ink, appearing to read 'Cesar Paula', with a stylized, cursive script.

CESAR PAULA
PRIMARY EXAMINER